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(54) **REMOTE CONTROL DEVICES, SYSTEMS, AND METHODS TO OUTPUT CONTENT WHILE FASTFORWARDING THROUGH CONTENT ON A SEPARATE DISPLAY DEVICE**

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G11B 27/00	(2006.01)
H04N 9/87	(2006.01)
H04N 5/445	(2011.01)
H04N 21/422	(2011.01)
H04N 21/472	(2011.01)
H04N 21/81	(2011.01)
H04N 5/44	(2011.01)

(52) **U.S. Cl.**

CPC ***H04N 5/765*** (2013.01); ***G11B 27/005*** (2013.01); ***H04N 5/44582*** (2013.01); ***H04N 9/87*** (2013.01); ***H04N 21/4222*** (2013.01); ***H04N 21/42209*** (2013.01); ***H04N 21/42221*** (2013.01); ***H04N 21/42222*** (2013.01); ***H04N 21/42224*** (2013.01); ***H04N 21/47217*** (2013.01); ***H04N 21/812*** (2013.01); *H04N 2005/4435* (2013.01); *H04N 2005/44547* (2013.01)

(58) **Field of Classification Search**

CPC H04N 21/4126
USPC 386/234
See application file for complete search history.

(56) **References Cited**

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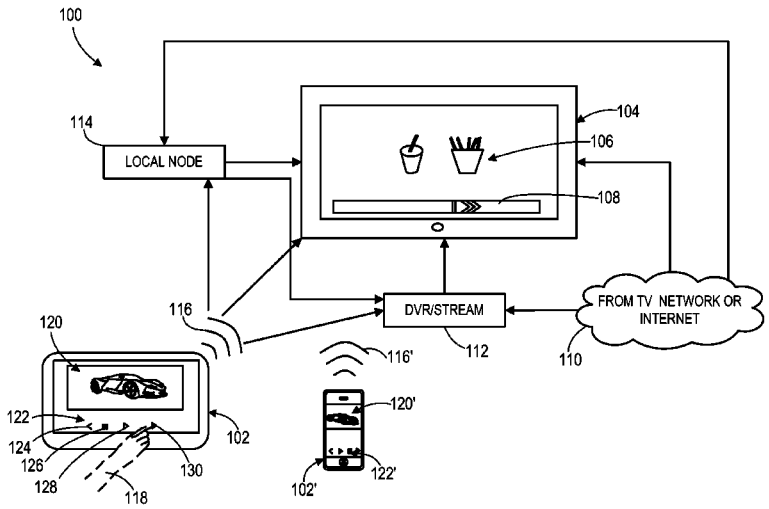
(57) **ABSTRACT**

A remote control device used by a viewer to control content being displayed on a separate display device outputs content in response to instructing the device providing content to the separate display device to begin fast forwarding. The viewer of the separate display device may then be exposed to the content being output by the remote control device while the content to the separate display device is fast forwarding. Thus, the viewer may better perceive the content being output by the remote control device than the content being fast forwarded on the separate display device. The outputting of content may be by the remote control device providing video, a static display, and/or audio. Upon the remote control device instructing the fast forwarding at the display device to stop and return to a play mode, the remote control device terminates the outputting of the content from the remote control device.

20 Claims, 6 Drawing Sheets



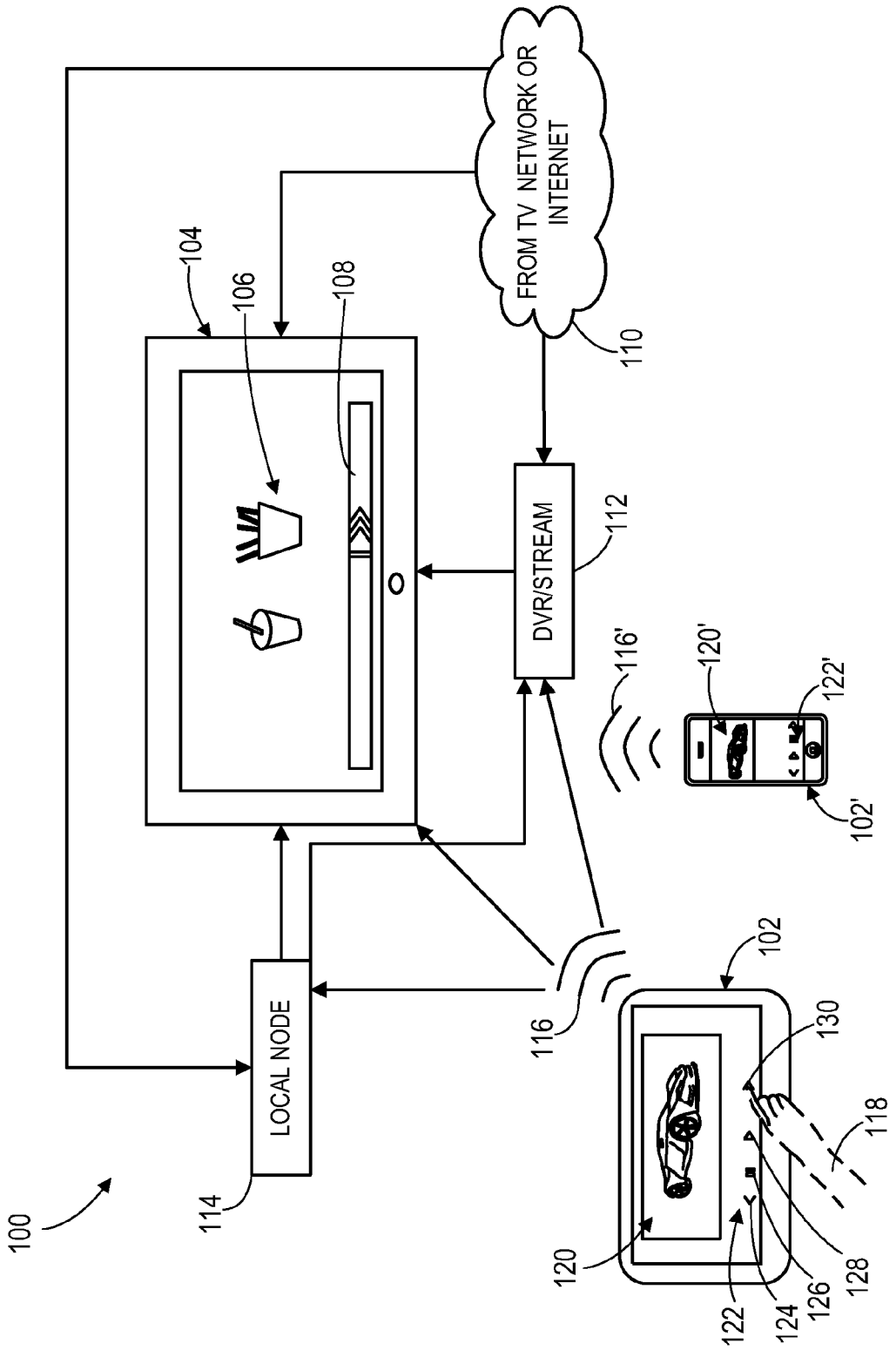

FROM TV NETWORK OR INTERNET
110
104
106
108
DVR/STREAM
112
116'
120'
122'
102'
LOCAL NODE
114
116
102
130
118
120
122
124
126
128
100

FIG. 1

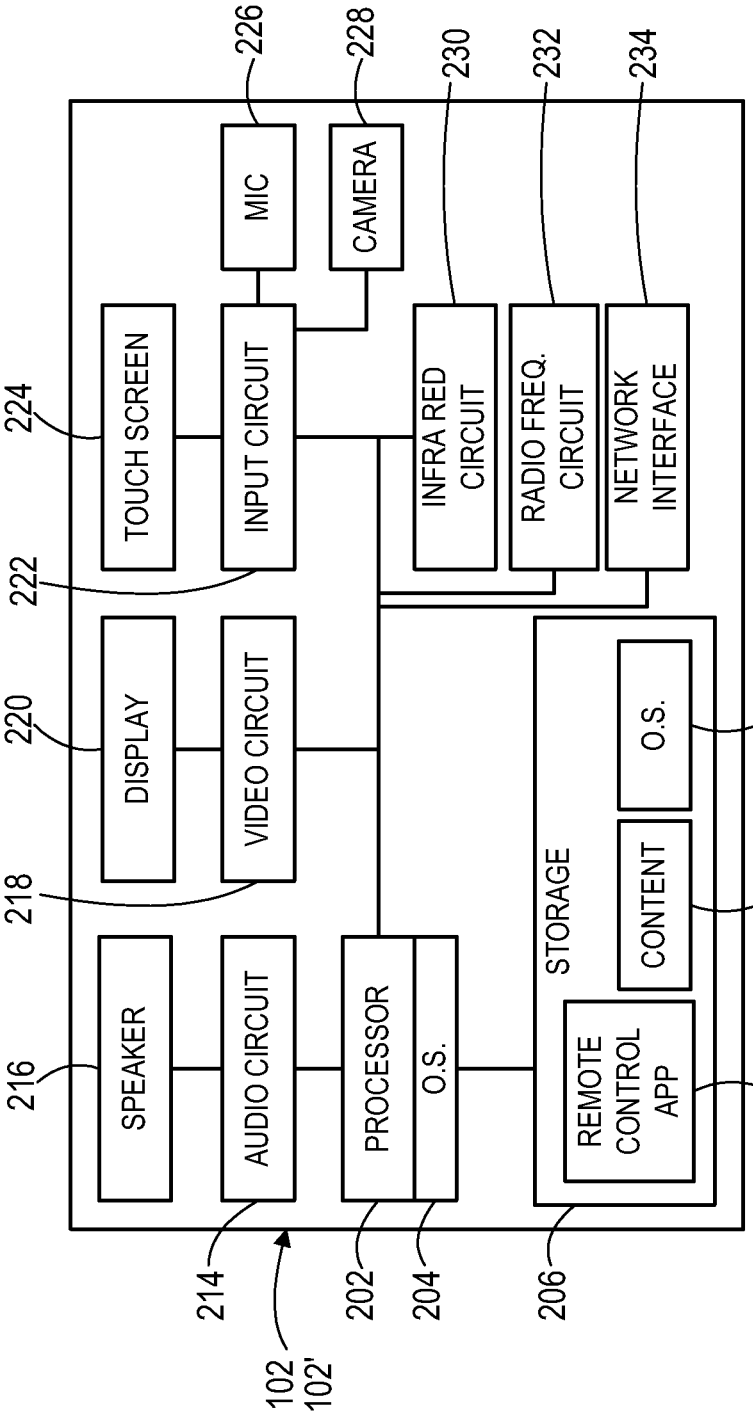

226
228
230
232
234
MIC
CAMERA
224
TOUCH SCREEN
INPUT CIRCUIT
INFRA RED CIRCUIT
RADIO FREQ. CIRCUIT
NETWORK INTERFACE
222
220
DISPLAY
VIDEO CIRCUIT
218
STORAGE
O.S.
208
CONTENT
210
216
SPEAKER
AUDIO CIRCUIT
PROCESSOR
O.S.
REMOTE CONTROL APP
212
214
202
204
206
102
102'

FIG. 2

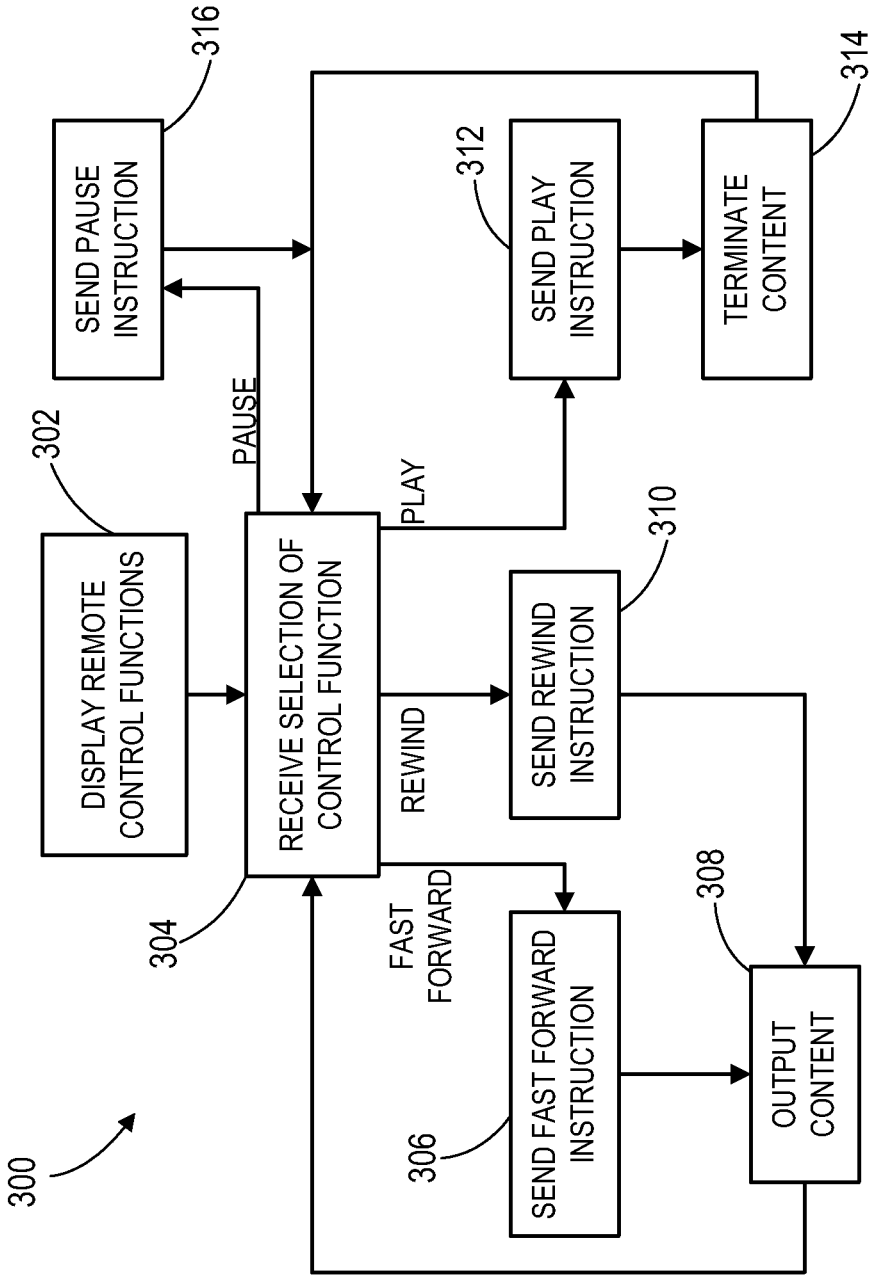

300
302
DISPLAY REMOTE CONTROL FUNCTIONS
304
RECEIVE SELECTION OF CONTROL FUNCTION
PAUSE
PLAY
REWIND
FAST FORWARD
316
SEND PAUSE INSTRUCTION
312
SEND PLAY INSTRUCTION
314
TERMINATE CONTENT
310
SEND REWIND INSTRUCTION
306
SEND FAST FORWARD INSTRUCTION
308
OUTPUT CONTENT

FIG. 3

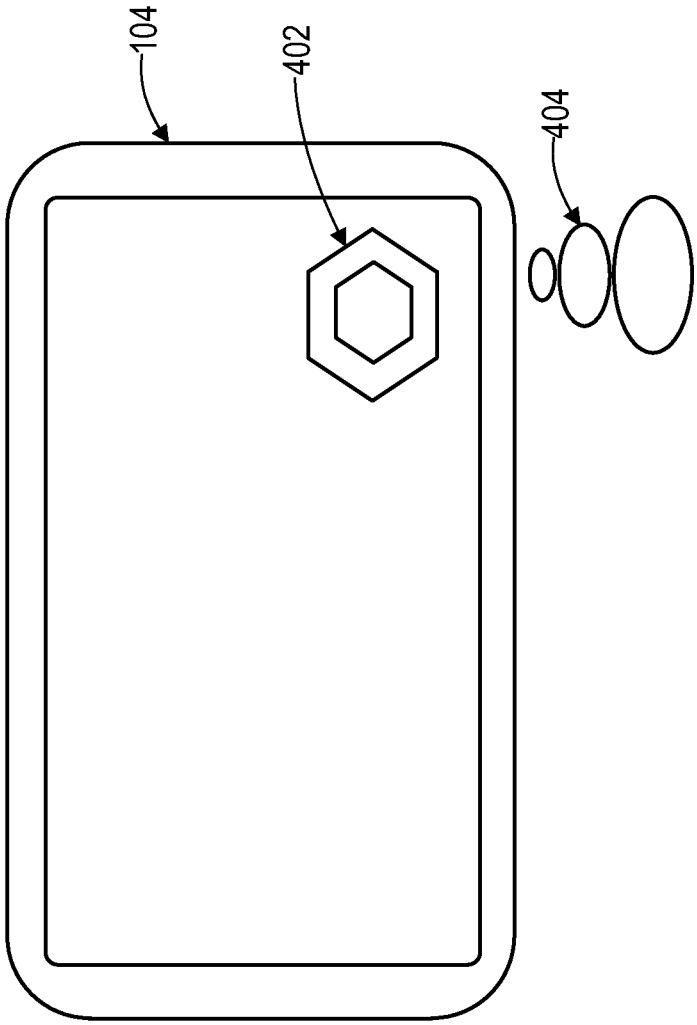


FIG. 4

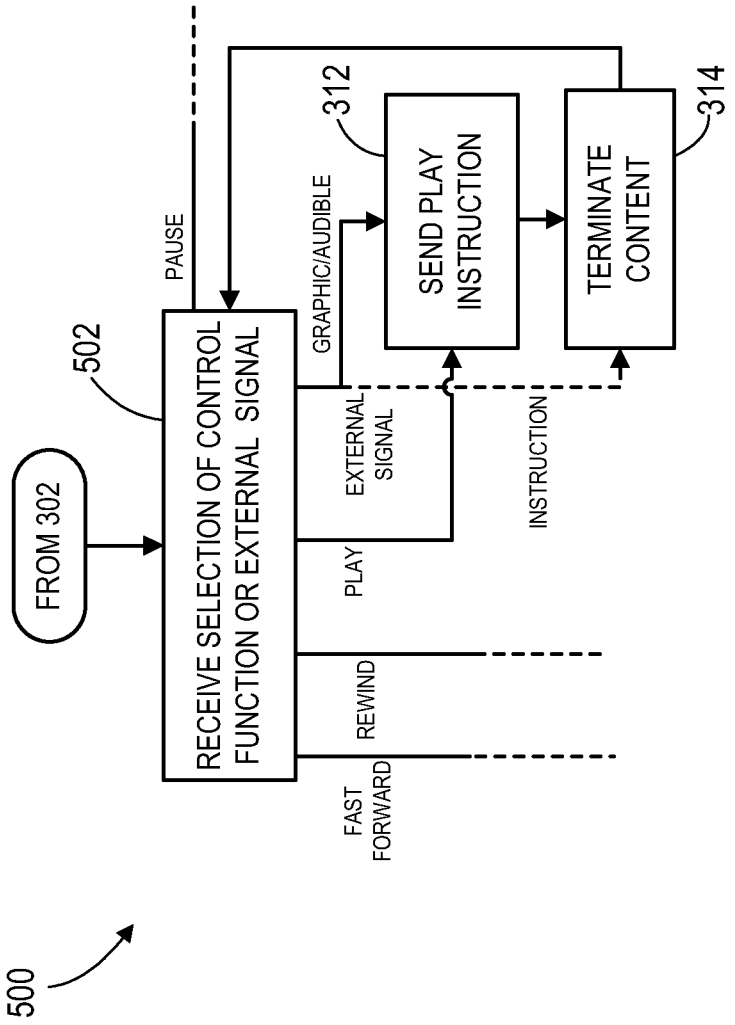

500
FROM 302
502
RECEIVE SELECTION OF CONTROL FUNCTION OR EXTERNAL SIGNAL
PAUSE
PLAY
REWIND
FAST FORWARD
GRAPHIC/AUDIBLE
EXTERNAL SIGNAL
312
SEND PLAY INSTRUCTION
INSTRUCTION
314
TERMINATE CONTENT

FIG. 5

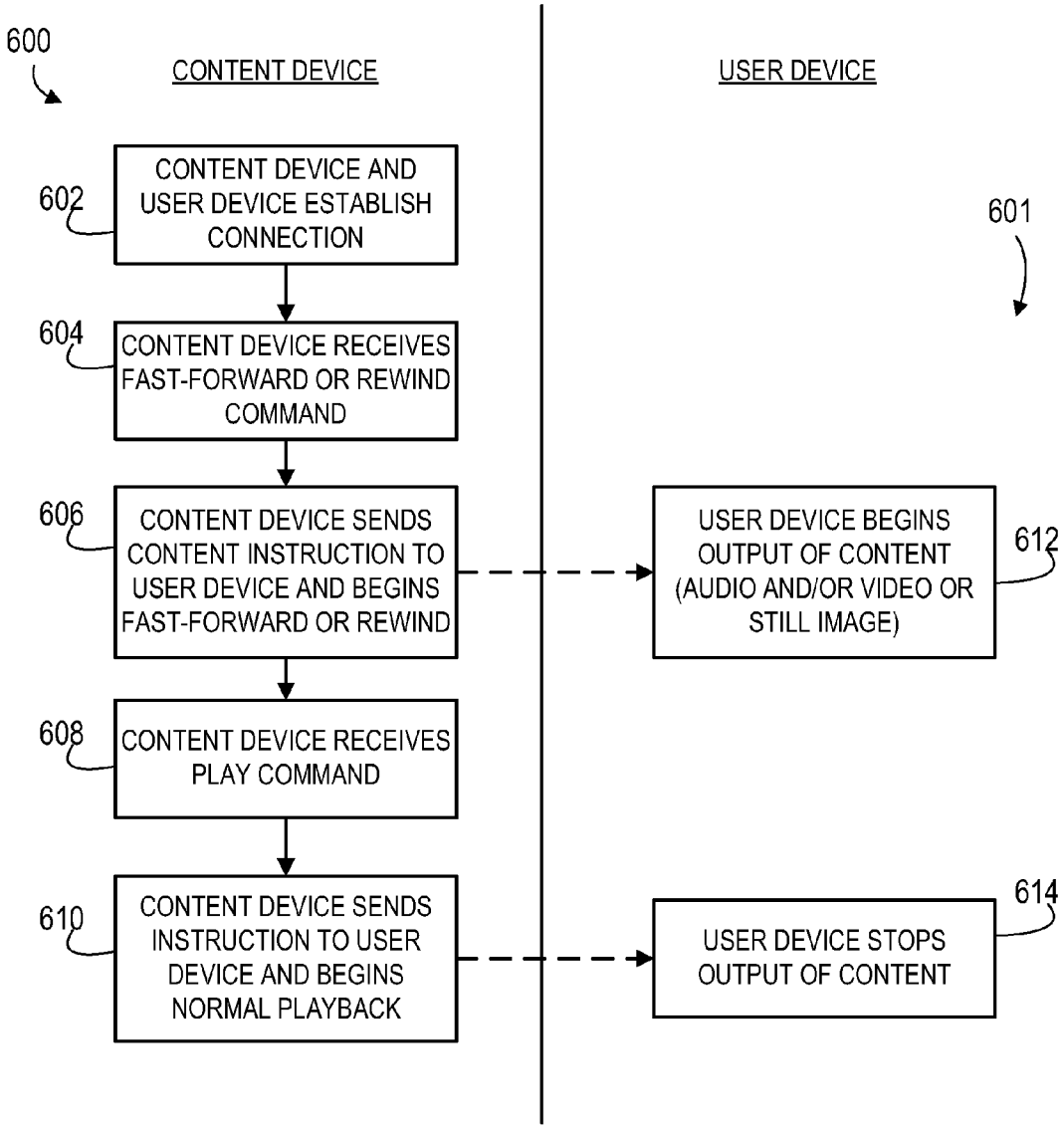

600
CONTENT DEVICE
USER DEVICE
601
602
CONTENT DEVICE AND USER DEVICE ESTABLISH CONNECTION
604
CONTENT DEVICE RECEIVES FAST-FORWARD OR REWIND COMMAND
606
CONTENT DEVICE SENDS CONTENT INSTRUCTION TO USER DEVICE AND BEGINS FAST-FORWARD OR REWIND
USER DEVICE BEGINS OUTPUT OF CONTENT (AUDIO AND/OR VIDEO OR STILL IMAGE)
612
608
CONTENT DEVICE RECEIVES PLAY COMMAND
610
CONTENT DEVICE SENDS INSTRUCTION TO USER DEVICE AND BEGINS NORMAL PLAYBACK
614
USER DEVICE STOPS OUTPUT OF CONTENT

FIG. 6

REMOTE CONTROL DEVICES, SYSTEMS, AND METHODS TO OUTPUT CONTENT WHILE FASTFORWARDING THROUGH CONTENT ON A SEPARATE DISPLAY DEVICE

TECHNICAL FIELD

Embodiments are related to remote control devices, systems, and methods that are used to control the fast forwarding of content on a separate display device. More particularly, embodiments are related to remote control devices, systems, and methods that output content while fast forwarding through content on the separate display device.

BACKGROUND

The ability for an advertiser to convey an advertising message to television viewers is hindered when the television viewer is using a digital video recorder (DVR) or a video on demand and opts to fast forward through the commercial break where the commercial of the advertiser is located. While fast forwarding, the viewer typically sees only bits and pieces of any given commercial during the commercial break, and the audio is typically muted altogether. Therefore, the value of the commercial break to the advertiser may be greatly diminished.

There have been efforts to address this issue. For instance, alternative commercial content may be displayed by the DVR on the same display device where the commercial break is being fast forwarded either as an overlay or as a total replacement. As a more drastic alternative, there have been proposals to block the fast forward function at least during the playback of certain content or commercials. In either case, the television viewer may not be satisfied, either with the alteration of the content being shown on the display device during fast forwarding or with the prevention of fast forwarding altogether.

SUMMARY

Embodiments address issues such as these and others by providing an output of content such as commercials from a remote control device while the content being displayed on a separate display device is being fast forwarded by operation of the remote control device. Thus, the content being displayed on the separate display device is not necessarily altered during fast forwarding of that content yet the television viewer operating the remote control device is exposed to the content being output from the remote control device during the fast forwarding of the content on the separate display device.

Embodiments provide a method of providing advertisements to a viewer of a display device. The method involves receiving a fast forward selection from the viewer on a remote control device to initiate a fast forwarding of content being displayed on a display device. The method further involves upon receiving the fast forward selection at the remote control device, beginning presentation of advertising content via a content output of the remote control device.

Embodiments provide a remote control device for providing advertisements to a viewer of a display device. The remote control device includes an input that receives a fast forward selection from the viewer to initiate a fast forwarding of content being displayed on a display device, a remote control instruction output that produces a fast forward instruction upon the input receiving the fast forward selection, and a content output that, upon the input receiving the fast forward selection, begins presentation of advertising content.

DESCRIPTION OF THE DRAWINGS

FIG. **1** shows an operating environment for embodiments that provide output of content on a remote control device while fast forwarding through content on a separate display device.

FIG. **2** shows an example of the components according to various embodiments of a remote control device to provide output of content at the remote control device while fast forwarding through content on a separate display device.

FIG. **3** shows an example of the logical operations that may be performed according to various embodiments of a remote control device to provide output of content at the remote control device while fast forwarding through content on a separate display device.

FIG. **4** shows an example where a separate display device outputs an external signal to a remote control device to terminate the output of content at the remote control device according to various embodiments.

FIG. **5** shows an example of logical operations of a remote control device to respond to an external signal to terminate the output of content at the remote control device.

FIG. **6** shows an example of logical operations that provide interaction between a content device and a user device according to other embodiments.

DETAILED DESCRIPTION

Embodiments provide remote control devices, systems, and methods that allow for a remote control device to initiate fast forwarding of content on a separate display device and output content from the remote control device while the fast forwarding of content on the separate display device is occurring. According to various embodiments, termination of the fast forwarding of content on the separate display device can then terminate the outputting of content on the remote control device.

FIG. **1** shows a typical operating environment **100** for various embodiments. A remote control device such as a computing device is present to control the display of content on a separate display device **104**. In this particular example, the remote control device may be a computing device **102** or **102'**, where the computing device **102** has a housing providing a tablet computer form factor while the computing device **102'** has a housing providing a smartphone form factor, such form factors being well known in the art.

The remote control device **102** has a display that shows remote control functions **122**, including a rewind function **124**, a pause function **126**, a play function **128**, and a fast forward function **130**. A television viewer **118** can touch the appropriate function on the display of the device **102** to cause a command to be sent to an external device that provides the content to the display device **104** and/or to the display device **104** itself where the display device **104** controls the content. Similarly, the remote control device **102'** has the same set of remote control functions **122'**.

The command to control the content being shown in the separate display device **104** may be sent via a wireless signal **116**, **116'** such as an infrared signal, a radio frequency signal such as a Bluetooth® signal or some other proprietary signal, or via an IEEE 802.11 protocol or other wireless networking signal. The signal **116**, **116'** may be directed to one of various components depending upon the configura-

tion of equipment being used to provide content to the separate display device **104**. For instance, a DVR **112** connected to a dedicated television distribution network **110** or a content streaming device connected to the Internet may be providing the content and in that case the signal **116**, **116'** is directed to that DVR **112** or streaming device. The DVR **112** or streaming device may additionally or alternatively be connected to the distribution network or Internet through a local node **114** such as a home router or gateway **114** and in such a case the signals **116**, **116'** may alternatively be wireless networking signals that are directed through the node **114** to the device **112**.

As another example, the display device **104** may have a direct connection to the television distribution network **110** or Internet and the signal **116**, **116'** may be directed to the display device **104**. The display device **104** may have a network connection to the node **114** and the signals **116**, **116'** may be wireless networking signals directed through the node **114** to the display device **104** in that case.

Upon the television viewer **118** deciding to fast forward through a commercial, or according to some embodiments fast forward through any content, by selecting the fast forward control function **130**, the content **106** being provided to the display device **104** begins to fast forward. The timeline **108** of the content may be displayed for the viewer **118** and may show an indicator of the fast forwarding mode that is currently in use.

The remote control device **102**, **102'** may respond to the television viewer **118** selecting the fast forward command **130** by beginning to output content that the television viewer **118** can perceive. For example, the remote control device **102**, **102'** may provide a video display **120** of content such as advertising content. Rather than video content, the remote control device **102**, **102'** may display static content such as a logo of a particular brand of product and/or an image of the product being advertised. As yet another example, the remote control device **102**, **102'** may output audio such as advertising content either in conjunction with video or a still image or as an alternative to a visual display. In any of these cases, the content being output by the remote control device **102**, **102'** may be related to commercial content being fast forwarded on the separate display **104** or may be unrelated to the commercial content on the separate display **104**.

The television viewer **118** is thereby provided with the ability to fast forward through commercial breaks in the programming being watched on the separate display **104** while still being exposed to content such as advertising content on the remote control device **102**, **102'**. This content from the remote control device **102**, **102'** may be significantly more perceptible to the television viewer **118** than the content being fast forwarded on the separate display device **104**. Thus, advertisers may be willing to purchase advertising time on the remote control device **102**, **102'**.

While the discussion thus far has been in the context of the television viewer **118** choosing to fast forward through content on the separate display device **104**, it will be appreciated that other functions selected by the viewer **118** may also trigger the remote control device **102**, **102'** to begin outputting content. One other example is when the viewer **118** chooses to select the rewind function **124**.

FIG. **2** shows an example of components that may be included in a remote control device **102**, **102'**. The remote control device **102**, **102'** may include a processor **202** such as a general purpose programmable processor, a dedicated purpose processor, hard wired digital logic, and the like. The processor **202** may implement an operating system **204** to allow the processor **202** to implement application programs and to interact with the various other components of the remote control device **102**, **102'**.

The processor **202** may access a storage device **206** such as a non-volatile memory where information may be stored. The information being stored may include various application programs, audio and/or visual content including advertising content, and the operating system **208**. One of the application programs may be a remote control application **212** that allows the computing device **102**, **102'** to function as a remote control device. As an alternative, the computing device **102**, **102'** may be a dedicated remote control device with the capability of outputting video and/or audio.

The processor **202** also communicates with one or more forms of a content output that provides the content to the viewer **118** from the remote control device **102**, **102'** while fast forwarding or rewinding content on the separate display **104**. For example, the processor **202** may communicate with an audio circuit **214** that drives a speaker **216** to produce audio that the viewer **118** can hear. As another example, the processor **202** may communicate with a video circuit **218** that drives the display screen **220** of the remote control device **102**, **102'** to display video or static images to the viewer **118** as well as to display the remote control functions **122**.

The processor **202** also communicates with one or more forms of input that allows some external action to control the operations of the processor **202**. For example, an input circuit **222** may be present and may allow the processor **202** to receive inputs from a first input such as a touchscreen **224**, the inputs including the selections of the remote control functions by the viewer **118**. According to some embodiments, the input circuit **222** may also allow the processor **202** to receive additional external signals via a second or subsequent input, such as audio information via a microphone **226** and/or visual information via a camera **228**. According to some embodiments, the processor **202** may communicate with a network interface **234**, such as an IEEE 802.11 wireless interface, as a second input to receive external signals in the form of data messages from the local data network that may control the operations of the processor **202**.

The remote control device **102**, **102'** also includes one or more forms of a remote control output to allow the remote control device **102**, **102'** to send the control function that has been selected by the viewer **118** to the device that provides the content to the separate display device **104**. For example, the processor **202** may communicate with an infrared circuit **230** to emit infrared signals that carry the control function selected by the viewer **118**. As another example, the processor **202** may communicate with a radio frequency circuit **232** to emit radio frequency signals such as Bluetooth® signals or other such signals that carry the control function selected by the viewer **118**. As yet another example, the processor **202** may communicate with the network interface **234** for purposes of delivering the control function as a data message over the local data network.

FIG. **3** shows an example of logical operations **300** that may be performed by the processor **202** of various embodiments of the remote control device **102**, **102'**. Initially, the processor **202** causes the remote control device **102**, **102'** to display the remote control functions at a display operation **302**. These functions may be persistently displayed on the screen or may be selectively displayed or hidden as an option for the viewer **118**. The processor **202** then receives a selection of a particular control function by the viewer **118** interacting with the touchscreen at a selection operation **304**.

In this particular example, the functions include fast forward, rewind, play, and pause.

When the received selection is the fast forward function, then the processor **202** causes the fast forward instruction to be sent to the appropriate separate device through a remote control output at an instruction operation **306**. As discussed above, the remote control output may be of various forms, such as in infrared signal, radio frequency signal, wireless networking signal, and the like.

The fast forward function that has been selected may be the standard fast forward function or may be an alternative fast forward function such as a successively selected 30 second skip function or a 30 second slip function. Because in any of these cases the viewer **118** may not adequately perceive the advertising content on the separate display device **104** as it is fast forwarding, the content being output by the remote control device **102**, **102'** at a normal speed may be better perceived.

At this point, the processor **202** also initiates the outputting of content from the remote control device **102**, **102'** at a content operation **308**. As discussed above, the outputting of content from the remote control device **102**, **102'** may be audio, video, and/or static images. The processor **202** then awaits another control function at the selection operation **304**.

When the received selection is the rewind function, then the processor **202** causes the rewind instruction to be sent to the appropriate separate device through a remote control output at an instruction operation **310**. Again, the remote control output may be of various forms, such as in infrared signal, radio frequency signal, wireless networking signal, and the like.

At this point, the processor **202** of this example also initiates the outputting of content from the remote control device **102**, **102'** at the content operation **308**. Again, the outputting of content from the remote control device **102**, **102'** may be audio, video, and/or static images. The processor **202** then awaits another control function at the selection operation **304**.

When the received selection is the play function, then the processor **202** causes the play instruction to be sent to the appropriate separate device through a remote control output at an instruction operation **312**. Again, the remote control output may be of various forms, such as in infrared signal, radio frequency signal, wireless networking signal, and the like.

At this point, the processor **202** of this example also terminates the outputting of content from the remote control device **102**, **102'** at a content operation **314**. By terminating the outputting of the content, the viewer **118** can again focus on the content at the separate display device **104** without distraction from the remote control device **102**, **102'**. The processor **202** then awaits another control function at the selection operation **304**.

When the received selection is the pause function, then the processor **202** causes the pause instruction to be sent to the appropriate separate device through a remote control output at an instruction operation **316**. Again, the remote control output may be of various forms, such as in infrared signal, radio frequency signal, wireless networking signal, and the like. According to some embodiments including the example shown, the processor **202** then awaits another selection at the selection operation **304**. As an alternative, the remote control device **102**, **102'** may begin outputting content at the content operation **308** in response to the pause function being selected.

In any of the cases above, some embodiments of the remote control device **102**, **102'** may also offer a skip function to the viewer **118**. This skip function may allow the viewer **118** to select to terminate the outputting of content while maintaining the fast forward, rewind, or pause mode. This skip function may be provided immediately upon beginning the outputting of content from the remote control device **102**, **102'** or may be provided after some period of time to ensure that at least some of the content being output has been perceived.

In some cases, in order for the viewer **118** to stop the fast forwarding by selecting the play function at the appropriate time, the viewer **118** needs to be viewing the separate display **104** to see that the content of interest, such as the post-commercial break content, has been reached. However, where the remote control device **102**, **102'** is outputting visual content through the display of the remote control device **102**, **102'**, the viewer **118** may not be paying adequate attention to the separate display **104**. By providing an audio output rather than a visual output of content at the remote control device **102**, **102'**, this issue may be avoided. However, various embodiments of the remote control device **102**, **102'** discussed below in relation to FIGS. **4** and **5** may also avoid this issue.

The separate display device **104** is shown in FIG. **4**. One manner of avoiding the issue of distracting the viewer **118** from selecting the play function at the proper time is to utilize the separate display device **104** as a source of an external signal to control the remote control device **102**, **102'**. Such control may be to send the play instruction from the remote control device **102**, **102'** at the proper time. To do so, the content being provided for display at the display device **104** may have a graphical element **402** or audible element **404** present in the audio/video stream of content being fast forwarded. For example, this graphical element **402**, or this audible element **404** in the case of a content device that may produce audio while fast forwarding, is positioned in the stream of content such as during or adjacent the black space that signifies then end of a commercial break.

This graphical element **402** or audible element **404** is able to be recognized by the remote control device **102**, **102'** as an external signal that represents the play function. The camera **228** may capture the graphical element **402** and/or the microphone **226** may capture the audible element **404** which instructs the processor **202** to send the play instruction and terminate the outputting of content at the remote control device **102**, **102'**. Thus, if the viewer **118** does not select the play function, the remote control device **102**, **102'** will perceive the graphical element **402** or audible element **404** and send the play function on behalf of the viewer **118**.

As another example of an external signal causing the remote control device **102**, **102'** to terminate the outputting of content, the device that is providing the content to the separate display device **104** may be in communication with the remote control device **102**, **102'** through a wireless form of communication. For example, the remote control device **102**, **102'** may be capable of receiving external signals through the infrared circuit **230**, through the radio frequency circuit **232**, and/or through the wireless networking interface **234**. In such a case, the device that is providing the content may have the ability to detect the end of the commercial break, such as by detecting the black space or by detecting information within the audio/video signal. In that case, the device providing the content to the display device **104** may be capable of returning to the normal play mode without receiving an instruction from the remote control device **102**,

102', but the remote control device **102**, **102'** continues to output content. Thus, upon detecting the end of the commercial break, the device that is providing the content to the display device **104** may then send the external signal to the remote control device **102**, **102'** to cause the remote control device **102**, **102'** to terminate the outputting of content as if the play function of the remote control device **102**, **102'** had been selected by the viewer **118**.

FIG. **5** shows an example of an alteration **500** to the logical operations **300** of FIG. **3** that allows the processor **202** to be responsive to such external signals, including a graphical or audible element or an instruction. After the display operation **302**, the processor **202** then receives either a selection by the viewer **118** via the touchscreen of one of the control functions or receives one of the forms of the external signal discussed above. Where the selection is the fast forward, rewind, play, or pause function, the processor **202** proceeds as described for FIG. **3**.

However, where the processor **202** receives a form of external signal, the operations then proceed as shown in FIG. **5**. Where the external signal is a graphical or audible element from the display device **104**, the processor **202** then causes the play instruction to be sent at the instruction operation **312** and terminates the content being output by the remote control device **102**, **102'** at the content operation **314**. Where the external signal is the data instruction from the device that is providing the content to the separate display device **104**, then the processor **202** may terminate the outputting of content from the remote control device **102**, **102'** at the content operation **314** without sending the play instruction. The device that is providing the content to the separate display device **104** has presumably already returned to the play mode considering this same device has provided the instruction to the remote control device **102**, **102'**.

FIG. **6** shows an example of logical operations of other embodiments where a content device interacts with a user device such that the user device provides content during fast forwarding or rewinding at the content device at the request of the content device. The content device may be of various forms, such as the DVR **112** or the television **104** of FIG. **1**, an Internet appliance and the like, that provides content for display at the television **104**. The user device may be of various forms such as the smartphone **102'**, the tablet **102**, a personal computer or any other type of device capable of providing audio and/or video or image content to the user separately from the display of content at the television **104**.

The logical operations **600** of the content device result in interaction with the user device to bring about the logical operations **601** of the user device. Initially, the content device and the user device may establish a connection, such as through a Wi-Fi connection, infrared, radio frequency, and the like at a connection operation **602**. As an alternative to this initial connection, the content device and the user device may interact at a later time as discussed below by the content device providing an audible or visual signal such as those discussed above with reference to FIG. **4**, albeit in a different context.

The content device receives a fast-forward or a rewind command from a user at a command operation **604**. This command may originate from the user device or may originate from an entirely different device such as a conventional remote control that lacks the ability to output content. In response to this command, the content device sends a content instruction to the user device and the content device then begins fast-forwarding or rewinding content on the television **104** as commanded at the content operation **606**. The content instruction may be provided through the pre-established wireless connection to the user device. Alternatively, where there is no pre-established wireless connection between the content device and the user device, the content device may provide the instruction via audible or visual information like that of FIG. **4** to instruct the user device.

Meanwhile, the user device receives the content instruction from the content device and responds to the instruction by beginning to output content at an output operation **612**. The content being output by the user device may be audio, video, still images, or combinations. Thus, there is content being output by the user device while the content device is fast-forwarding or rewinding through content being provided to the television **104**, regardless of whether the fast-forward or rewind command originated from the user device or from a conventional remote control.

Eventually the content device will receive a play command initiated by the viewer that originates from either the user device or from another device such as a conventional remote control at a command operation **608**. In response to this command, the content device sends a content instruction to the user device and the content device then begins normal playback of content on the television **104** as commanded at the content operation **606**. The content instruction may be provided through the pre-established wireless connection to the user device. Alternatively, where there is no pre-established wireless connection between the content device and the user device, the content device may provide the instruction via audible or visual information like that of FIG. **4** to instruct the user device. The user device responds to the instruction by terminating the output of content at an output operation **614**.

While embodiments have been particularly shown and described, it will be understood by those skilled in the art that various other changes in the form and details may be made therein without departing from the spirit and scope of the invention.

The invention claimed is:

1. A method of providing advertisements to a viewer of a display device, comprising:

storing advertising content on a remote control device;

after storing the advertising content, receiving a fast forward selection from the viewer on the remote control device to initiate a fast forwarding of content being displayed on a display device;

upon receiving the fast forward selection at the remote control device, beginning outputting of the stored advertising content via a content output of the remote control device;

receiving a play selection from the viewer on the remote control device to terminate a fast forwarding of content being displayed on the display device; and

upon receiving the play selection at the remote control device, terminating the outputting of advertising content via the content output of the remote control device.

2. The method of claim **1**, wherein the outputting of advertising content via the content output of the remote control device is video advertising content that is displayed on a screen of the remote control device.

3. The method of claim **1**, wherein the outputting of advertising content via the content output of the remote control device is audio advertising content that is produced by a speaker of the remote control device.

4. The method of claim **1**, wherein the remote control device is a computing device that has an operating system and that implements an application program to receive the fast forward selection, to initiate the fast forwarding of

content being provided to the display device, and to begin presentation of the advertising content via the content output of the computing device.

5. The method of claim **4**, wherein the computing device is a tablet form factor.

6. The method of claim **4**, wherein the computing device is a smartphone form factor.

7. A remote control device for providing advertisements to a viewer of a display device, comprising:

a storage medium that stores advertising content;

an input that receives a fast forward selection from the viewer after the storage device has stored the advertising content to initiate a fast forwarding of content being displayed on a display device;

a remote control instruction output that produces a fast forward instruction upon the input receiving the fast forward selection; and

a content output that, upon the input receiving the fast forward selection, begins outputting the advertising content stored in the storage medium;

wherein the input receives a play selection from the viewer to terminate a fast forwarding of content being displayed on the display device, wherein the remote control output produces a play instruction upon the input receiving the play selection, and wherein the content output terminates presentation of advertising content upon the input receiving the play selection.

8. The remote control device of claim **7**, wherein the content output is a display screen and the advertising content comprises video.

9. The remote control device of claim **7**, wherein the content output is a speaker and the advertising content comprises audio.

10. The remote control device of claim **7**, further comprising a processor and wherein the storage medium contains an operating system and an application program, wherein the processor implements the operating system to execute the application program to receive the fast forward selection via the input, to produce the fast forward instruction via the remote control instruction output, and to begin outputting advertising content via the content output.

11. The remote control device of claim **10**, further comprising a housing having a tablet form factor.

12. The remote control device of claim **10**, further comprising a housing having a smartphone form factor.

13. The remote control device of claim **7**, wherein the input comprises a touchscreen.

14. The remote control device of claim **7**, wherein the remote control output comprises an infrared emitter.

15. The remote control device of claim **7**, wherein the remote control output comprises a network interface.

16. A method of providing advertisements to a viewer of a display device, comprising:

receiving a fast forward selection from the viewer on a remote control device to initiate a fast forwarding of content being displayed on a display device;

upon receiving the fast forward selection at the remote control device, beginning outputting of advertising content via a content output of the remote control device;

receiving a play selection from the viewer on the remote control device to terminate a fast forwarding of content being displayed on the display device; and

upon receiving the play selection at the remote control device, terminating the outputting of advertising content via the content output of the remote control device.

17. A method of providing advertisements to a viewer of a display device, comprising:

receiving a fast forward selection from the viewer on a remote control device to initiate a fast forwarding of content being displayed on a display device;

upon receiving the fast forward selection at the remote control device, beginning

outputting of advertising content via a content output of the remote control device;

receiving at a second input of the remote control device an external signal to terminate a fast forwarding of content being displayed on the display device, and wherein the content output terminates the outputting of advertising content upon the second input receiving the external signal.

18. The method of claim **17**, further comprising producing a play instruction from the remote control output upon the second input receiving the external signal.

19. The method of claim **17**, wherein the second input comprises a camera and wherein the external signal comprises a graphical element being output by the display device that is captured by the camera.

20. The method of claim **17**, wherein the second input comprises a network interface and wherein the external signal comprises a data message transferred over a network to the network interface.

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